

**Review** To **solve a problem**, first define it in a clearly written problem statement. Then, brainstorm possible solutions and identify the positive and negative consequences of each one. Next, generate **criteria** for judging each solution and use the criteria to choose the preferred solution.

**Directions:** First **read** the boxed problem and possible solutions. Then **answer** each question in order to help solve the problem.

**Problem: The Bake Sale**

Liam is making pumpkin pies for a bake sale that begins in one hour. While preparing the filling, he realizes he doesn't have cinnamon or ginger. These two ingredients are the key to the pies' great flavor. He looks at the clock and realizes that going to the store and back to buy the ingredients will take up most of the hour he has planned for baking the pies.

**Possible Solutions:**

**Option 1:** go and buy the ingredients

**Option 2:** make the pies without the ingredients

1. What is the *best* statement of the problem?
  - a. Pies taste better with cinnamon and ginger, spices that are hard to find.
  - b. Buying missing ingredients for pies will make Liam late to the bake sale.
  - c. Liam can't finish his pies in time for the bake sale.
2. What is a possible *positive* result for option 1? \_\_\_\_\_  
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3. What is a possible *negative* result for option 1? \_\_\_\_\_  
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4. What is a possible *positive* result for option 2? \_\_\_\_\_  
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5. What is a possible *negative* result for option 2? \_\_\_\_\_
6. The bake sale goes on for many hours. If timeliness is *not* the most important criteria, which is the preferred solution? \_\_\_\_\_  
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